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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/635,830	08/09/2000	Andrew J. Layman	MS1-521US	5560
22801	7590	01/27/2005	EXAMINER	
LEE & HAYES PLLC 421 W RIVERSIDE AVENUE SUITE 500 SPOKANE, WA 99201			TRAN, QUOC A	
			ART UNIT	PAPER NUMBER
			2176	
DATE MAILED: 01/27/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/635,830

Applicant(s)

LAYMAN ET AL.

Examiner

Quoc A. Tran

Art Unit

2176

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 July 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18, 42, 45 and 48 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18, 42, 45 and 48 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. This action is responsive to Amendment A, filed 07/25/2004.
2. Claims 1-18, 42, 45 and 48 are currently pending in this application. Claims 1, 16-17, 42, 45 and 48 are independent claims.

Claim Rejections - 35 USC § 101

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-14, and 17-18 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The claims invention set forth non-functional descriptive material but fails to set forth physical structures or materials comprising of hardware or a combination of hardware and software within the technological arts (i.e. a computer) to produce a "useful, concrete and tangible" result. Claims 1-14, and 17-18 are interpreted as software per se, abstract ideas or mental construct and not tangibly embodied on a computer readable medium or hardware.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-2, 4-17, 42, 45 and 48 are rejected under 35 U.S.C. 102(e) as being anticipated by Martin et al. (hereinafter Martin) “Professional XML”, Public Release 01/2000, By Wrox Press Ltd, Birmingham, UK.

In regard to independent claim 1, “Generating a data structure (“datastruct”) element representative of a data structure of a first object the datastruct element”, as taught by Martin, at pages 74-79, chapter 3, especially bottom of page 74 (i.e....XML element types...attribute assigned to a specific element type),

“a first object the datastruct element”, as taught by Martin, at pages 111-113, chapter 4, especially middle of page 113 (i.e....<Holiday>). Examiner reads as first object of the datastruct;

“first object the datastruct element having a pair of data structure tags”, as taught by Martin, at pages 111-113, chapter 4, especially middle of page 113

(i.e....<Holiday>.....</Holiday>). Examiner reads as a pair of data structure tags;

“wherein the data structure tags identify the datastruct element”, as taught by Martin, at pages 111-113, chapter 4, especially middle of page 113 (i.e....<Holiday>

....</Holiday>). Examiner reads as data structure tags <Holiday>... </Holiday> is identify the element of the first object, which was define as "Holiday".

"generating contents of the datastruct between the datastruct the contents comprising one or more data parameter elements representative of one or more data parameter of the first object data structure", as taught by Martin, at pages 111-113, chapter 4, especially middle of page 113 (i.e....

<Holiday>

<Journey>.....

<from>.....</ to>

<Date>.....</Date>

</ Journey>

.....

</Holiday>

Examiner reads contents <Journey>..... <from>.....</ to> <Date>.....</Date>

</Journey> are data parameter elements, which generates from the first objetct

<Holiday>,

"each parameter element having a pair of parameter tags associated therewith, wherein each pair of parameter tags identifies a parameter element with which the pair of tags is associated, each parameter element having associated data between the pair of parameter tags", as taught by Martin, at pages 111-113, chapter 4, especially middle of page 113 (i.e....

<Holiday>

<Journey>.....

<from>.....</ to>

<Date>.....</Date>

</ Journey>

.....

</Holiday>.

Examiner reads contents <Journey>..... <from>.....</ to> <Date>.....</Date>

</Journey> are data parameter elements, which generates from the first object

<Holiday>, and each parameter elements having a pair of tags, that is associated with

each other. For more support to the example above, Examiner would like to include the

following example as well, as taught by Martin, at pages 109-126, chapter 4

(i.e....mapping the information... representing object types...representing

relationship.....:

<book

author= "Nelson Mandela"

title="Long Walk to Freedom"

publisher= "Abacus"

isbn="0-349-10653-3" />....

Here is the same information, this time representing the properties as child elements:

<book>

<author>Nelson Mandela</author>

<title>Long Walk to Freedom</title>

```
<pubi isher>Abacus</publisher>  
<isbn>O-349-10653-3</isbn>  
</book>....).
```

In regard to dependent claim 2, *" the contents further comprise at least cue object reference referencing a second object within the data structure of the first object without including the second object within the contents of the datastruct element,"* as taught by Martin, at pages 122-124, chapter 4 (i.e....relationship in your model can be represented by using nested elements..."contain" relationships, for example <footnote> element can be nested within a <chapter> element, and <hotel> element can be nested within a <resort> element.....

```
<itinerary>  
  <traveler id= "t01">  
    <name> Mrs Mary Higgins</ name >  
  </traveler>  
  <traveler id=" t02">  
    < name > Mr John Higgins</name>  
  </traveler>  
  <traveler id="t03">  
    < name > Rory Higgins</name>  
    <age> 12</age>  
  </ traveler>  
  <traveler id='t04'>
```

<name> Kylie Higgins</name>

<age> 9< / age>

</traveler>

.....

</itinerary>...).

In regard to dependent claim 4, *"the contents comprises a data type definition for at least one data parameter element"*, as taught by Martin, at pages 121-122, chapter 4 (i.e.... DTD (data type definition)... define... attributes and child element...).

In regard to dependent claim 5, *"the contents comprises a reference to a data type definition for at least one data parameter element."*, as taught by Martin, at pages 121-122, chapter 4 (i.e.... DTD (data type definition)... define... attributes and child element...).

In regard to dependent claims 6-7, incorporate substantially similar subject matter as cited in claims 1 above, and is similarly rejected along the same rationale.

In regard to dependent claims 8-9, incorporate substantially similar subject matter as cited in claims 1 and 4-5 above, and is similarly rejected along the same rationale.

In regard to dependent claim 10, *"the datastruct element and its contents are encoded using XML"*, as taught by Martin, at pages 75-76, chapter 3 (i.e.... formal DTD structure... XML...).

In regard to dependent claim 11, *"inserting the datastruct element into a message; and sending the message to an entity on a network"*, as taught by Martin, at

pages 504-510, chapter 11, see figures at pages 506-507 (i.e. ... XML-RPC (xml remote procedure calling) and SOAP (simple object access protocol) protocol...).

In regard to dependent claim 12, *“formatting the message for sending over a network using HTTP; sending the message to an entity on the network by using HTTP”*, as taught by Martin, at pages 507-509, chapter 11, see figure top of page 509 (i.e....XML-RPC operates over pure HTTP...).

In regard to dependent claim 13, *“binding the message into a HTTP request; sending the message to an entity on the network by using HTTP”*, as taught by Martin, at pages 507-509, chapter 11, see figure top of page 509 (i.e. ...XML-RPC operates over pure HTTP...).

In regard to dependent claim 14, incorporate substantially similar subject matter as cited in claim 1 above, and is similarly rejected along the same rationale.

In regard to dependent claim 15, is directed to a computer readable storage medium for performing the method of claim 1 above, and is similarly rejected along the same rationale.

In regard to dependent claim 16, incorporate substantially similar subject matter as cited in claims 1 and 10 above, and is similarly rejected along the same rationale.

In regard to dependent claim 17, incorporate substantially similar subject matter as cited in claim 1 above, and is similarly rejected along the same rationale.

In regard to independent claim 42, is directed to a computer readable storage medium for performing the method of claim 1 above, and is similarly rejected along the same rationale.

In regard to independent claim 45, is directed to an apparatus for performing the method of claim 1 above, and is similarly rejected along the same rationale.

In regard to independent claim 48, is directed to a computer for performing the method of claims 1 and 10 above, and is similarly rejected along the same rationale.

Claim Rejections - 35 USC § 103

4. **The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:**

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3 and 18 are rejected under 35 U.S.C. 103(a) being unpatentable over Martin et al. (hereinafter Martin) "Professional XML", Public Release 01/2000, By Wrox Press Ltd, Birmingham-UK, in view of Martin – US006704743B1 provisional No.60/153,651 - filed 09/13/1999 (hereinafter '743).

In regard to dependent claim 3, Martin does not explicitly teach, "*the second object is the first object.*", however as taught by '743, at col. 30, lines 10-25 (i.e.... FIGS. 20A—20C illustrate a working example of implicit inheritance. As shown in FIG. 20A, for

example, a working storage 300 and a persistent storage 302 are illustrated as including a parent entity ("customer" having a persistent representation 304 with a customer number ... An exemplary pair of child entities ("customer #223" and "customer #224") with persistent representations 310, 314 are also illustrated, with each including a customer number field 312, 316 that overrides the customer number field 306 of the parent entity. However, given that each child entity does not explicitly override the preferred field 308, each child entity is considered to implicitly inherit this field from the parent entity. ...).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have modified '743 into Martin's teaching, to provide a way, wherein the second object is the first object. One of the ordinary skill in the art would have been motivated to modify this combination to provide solution of the limitation of restricting of the inheritance of fields and other object-oriented entity in application that rely on underlying databases and persistent storage of object-oriented entities, as taught by '743, at col. 3, lines 50-67 (i.e. ... of the limitation of restricting of the inheritance of fields and other object-oriented entity...).

In regard to dependent claim 18, incorporate substantially similar subject matter as cited in claim 3 above, and is similarly rejected along the same rationale.

Response to Argument

5. Applicant's remarks on page 11-12, hereby elects to prosecute Group I, with respect to claim 1-18, 42, 45 and 48. Examiner has completed a thorough study of the application, but is moot in view of the rejection, which is stated above.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Chau et al.	US20020156772A1	Filed	01/31/2002
Ankireddipally et al.	US006772216B1	Filed	05/19/2000

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Quoc A. Tran whose telephone number is (571) 272-4103. The examiner can normally be reached on Monday through Friday from 8:30AM to 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph H. Feild can be reached on (571) 272-4090. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov>.
Should you have questions on access to the Private PAIR system, contact the
Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Quoc A. Tran
Patent Examiner
Technology Center 2176
January 23, 2005


JOSEPH FEILD
SUPERVISORY PATENT EXAMINER